G+H N-1

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604

June 11, 2001

Mr. David Tripp/Mr. Grant Gilezan
On Behalf of the G&H PRP Group
Dykema, Gossett
400 Renaissance Center
35th Floor
Detroit, Michigan 48234

Re: Barrier Wall Performance Requirements
G&H LF, Macomb County, MI

Dear Mr. Tripp/Mr. Gilezan:

This letter responds to your letter of February 20, 2001, in which Conestoga-Rovers and Associates (CRA), on behalf of the G&H Landfill PRP Group (Group), requested that the U.S. Environmental Protection Agency (U.S. EPA) approve of a revision to one of the consent decree/scope of work performance requirements for the soil/bentonite barrier wall installed at the G&H Landfill site. Specifically, the Group requested that we delete the requirement for a 2.0-foot inward groundwater gradient across the barrier wall and instead the Group would maintain an unquantified "inward gradient" across the barrier wall. The Group also requested temporary dispensation from the inward gradient requirement - in times of drought or system upset, for example.

Upon review of the Group's request and in light of current site operating data, U.S. EPA declines to delete or change the 2.0-foot inward gradient requirement at this time. We agree that, in theory, any inward gradient may demonstrate containment. We also agree that the U.S. EPA study, "Evaluation of Subsurface Engineered Barriers at Waste Sites" (EPA-542-R-98-005, August 1998), in which the Agency reviewed 36 sites at which barrier walls were installed, indicated that the highest inward head differential requirement for the sites studied was a 1-foot inward gradient. However, until very recently, the Group has not been able to routinely demonstrate an inward gradient at all monitoring points along the site barrier wall. Thus, until we have an adequate track record of continually demonstrating an inward gradient along the barrier wall, we believe it is premature to change the 2.0-foot inward gradient requirement in the consent decree.

Additionally, the G&H Landfill site barrier wall does not encircle the entire site, which is a different situation from the example sites in the U.S. EPA study. During the site consent decree negotiations CRA made several arguments to support the partial slurry wall concept and indicated that a 2.0-foot head differential would provide a good margin

of safety should the groundwater extraction system fail and need to be shut down for repairs.

Lastly, I note that in the most recent site Quarterly O&M Report the March 2001 operational data demonstrate that the Group is able to achieve a 2.0-foot inward gradient at most monitoring points along the barrier wall, likely due to the new pumps being installed and being brought online earlier this year.

The Agency is open to reevaluation of the request in the future. However, we would like to see the Group be able to routinely demonstrate a 2.0-foot inward gradient for a significant period of time before we reevaluate the request. The first Five-Year Review for the G&H Landfill site is due August 2001. I propose that we wait until the next Five-Year Review (August 2006) to reevaluate the merits of the 2.0-foot inward gradient requirement.

U.S. EPA agrees in principle that maintenance of the 2.0-foot inward gradient is subject to various forces as contemplated or discussed by the Group in previous instances. Should drought conditions or temporary system shutdowns occur, we would not expect a 2.0-foot gradient to be easily achieved or maintained. We do expect rapid response to system upsets to restart the pumping to achieve the 2.0-foot gradient in a reasonable amount of time. (I note that the Group has been receiving this benefit all along as we have not been pursuing penalties for non-achievement of the 2.0-foot gradient during the initial O&M period. We have been allowing the Group to evaluate and redesign parts of the system as appropriate without the threat of penalty for non-achievement.) During drought conditions we would expect the Group to timely demonstrate to us that a 2.0-foot inward gradient is not feasible and to determine a feasible alternative inward gradient that would be maintained until the drought conditions abate.

Please feel free to contact me at (312) 886-7078 should you need to discuss the above.

Sincerely,

Kevin Adler
G&H Project Manager

cc: J. Cahn, C-14J
L. Summerfield, MDEQ